

Appl. No. 09/802,698
Amdt. Dated March 21, 2005
Reply to Office action of December 21, 2004
Attorney Docket No. P13661-US2
EUS/J/P/05-1082

REMARKS/ARGUMENTS

1.) Claim Amendments

The Applicant has cancelled claims 22-28, without prejudice or disclaimer. Claims 1-21 and 29-57 remain pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Claim Rejections – 35 U.S.C. §101

The examiner rejected claims 1-57 as being directed to non-statutory subject matter. The Applicants respectfully traverse the rejection.

The Examiner asserts that the claims are directed to “mathematical algorithm not embedded in a computer readable medium.” The Applicants fail to understand the rejection – and the Examiner provides no reasons for such a conclusion. First, there are no particular mathematical algorithms recited in the claims. Second, even if there were, it is only the *per se* claim to a mathematical algorithm that is generally unpatentable. As recognized by the U.S. Supreme Court, a system or process that embodies an algorithm (or step-by-step procedure for accomplishing a given result) is directed to statutory subject matter. See: *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ 673 (1972). See, also: *In re Iwahashi*, 888 F.2d 1370, 1374, 12 USPQ2d 1908, 1911 (Fed. Cir. 1989). Accordingly, the Applicants traverse the rejection of the claims as being directed to nonstatutory subject matter.

3.) Claim Rejections – 35 U.S.C. §103(a)

The Examiner rejected claims 1-57 as being unpatentable over Koodli (US 6,608,841). The Applicants traverse the rejection.

Claim 1 recites:

1. A bit error resilience method for an Internet Protocol (IP) stack based on a secure link layer having functionality for packet error detection, said method comprising the steps of:
analyzing packets at said secure link layer to determine whether the packets are header compressed; and

Appl. No. 09/802,698
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forwarding at least header compressed packets with detected errors at said link layer upwards in the protocol stack for higher-level error protection. (emphasis added).

As noted in Applicants' detailed description of the claimed invention:

"The invention is based on the recognition that for IP-based applications, such as compressed voice or video, in which the payload is built up of parameters that have different levels of importance for the final application quality, it is interesting to propagate packets with bit errors in the less important parameters upwards in the IP stack for use in the application as long as the more important parameters are correct. The basic problem of secure link layers such as the HDLC link layer is that any frame with an error indicated by the link layer checksum is normally discarded." (page 8, lines 7-13; emphasis added).

Thus, according to Applicants' invention as recited in claim 1, if a header compressed packet is received by a secure link layer, compressed packets with detected errors at the secure link layer are forwarded upwards in the protocol stack for higher-level error protection. Koodli fails to disclose, much less suggest, that element of the invention

The Examiner recognizes that Koodli relates to methods of providing header compression, and a technique for reconstructing headers in the presence of packet losses and errors; Applicant does not disagree with that characterization of Koodli. Applicants' invention, however, is not directed to dealing with packet errors by reconstructing headers; rather, Applicants invention recognizes that for certain applications, certain packets with detected errors at the link layer can be forwarded upwards in the protocol stack for higher-level error protection, without significant effect on the application. For example, for voice and video applications, an error in a packet may not render the packet payload completely useless, but may simply decrease the quality of the voice or video output of the application. This aspect of Applicants' invention is not disclosed, or suggested, by Koodli.

In concluding that claim 1 is unpatentable over Koodli, the Examiner asserts that "Koodli is basically teaching the same as the applicant's invention for routing or forwarding header compressed packets." The Examiner's statement mischaracterizes both the teachings of Koodli and Applicants' claimed invention. Although Koodli does

Appl. No. 09/802,698
Amdt. Dated March 21, 2005
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Attorney Docket No. P13861-US2
EUS/J/P/05-1082

relate, in part, to the routing of header compressed packets between physical nodes, its teachings are directed to the reconstruction of packet headers in the presence of packet losses and errors. Similarly, although Applicants' invention is dependent on packets received from another physical node, it does not relate to routing or forwarding such packets to another physical node, but forwarding compressed packets with detected errors at the link layer upwards in the protocol stack for higher-level error protection; the protocol stack resides within one physical node. The Examiner has not pointed to any teaching, or suggestion, in Koodli of such functionality. Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of claim 1.

Whereas claim 29 recites limitations analogous to those of claim 1, that claim is also patentable over Koodli. Furthermore, whereas claims 2-20 and 30-57 are dependent upon claims 1 and 29, respectively, and include the limitations thereof, those claims are also patentable over Koodli.

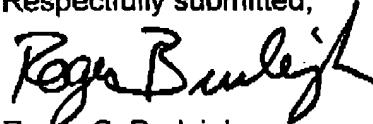
Appl. No. 09/802,898
Amdt. Dated March 21, 2005
Reply to Office action of December 21, 2004
Attorney Docket No. P13861-US2
EUS/J/P/05-1082

CONCLUSION

In view of the foregoing amendments and remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1-21 and 29-57.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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